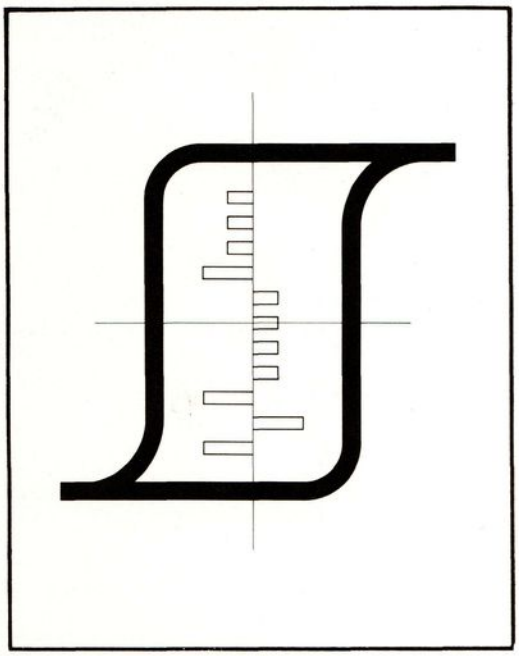
BULLETIN NO. 1075
March 15, 1965

MEMORY PRODUCTS



FERRITE MEMORY CORE
Type FC-8001

FC-8001 is an 80 mil ferrite memory core which exhibits a relatively fast switching speed at moderate drive currents. It is recommended for use in memories having cycle times of 4 to 6 microseconds. At a nominal drive current of 800 milliamperes, FC-8001 has a switching time of approximately 1.0 microseconds.

MECHANICAL SPECIFICATIONS

Outside Diameter . . . . . 0.080"± 0.002"
Inside Diameter . . . . . 0.050"± 0.002"
Thickness . . . . . 0.025"± 0.002"

Fracture strength: The core will not fracture when subjected to a compressive force of 400 grams applied between parallel plane surfaces normal to the core diameter.

TYPICAL OPERATING CONDITIONS (at 25°C):

Drive Currents

Ir = Iw = 800 milliamperes
Ipw = 400 milliamperes
tr = 0.2 microseconds
td = 4.0 microseconds

Output Signals

uV1 = 130 millivolts
dVz = 20 millivolts
tp = 0.55 microseconds
ts = 1.0 microseconds

TEST SPECIFICATIONS (at 25°C):

Drive Current Pulse Sequence

All cores are tested using the pulse sequence shown in Figure 1. Cores are delivered 100% tested to a 0.015 AQL as defined by MIL STD-105D, Inspection Level II.

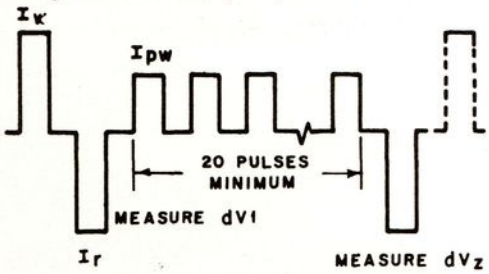


Figure 1.

Test Drive Conditions

Ir = Iw = 740 milliamperes ± 1%
Ipw = 470 milliamperes ± 1%
tr = 0.2 microseconds
td = 3.0 microseconds

Test Output Signals

uV1 = 90 millivolts minimum. The maximum variation in uV1 within a given lot will be no greater than ± 12%.
dVz = 20 millivolts maximum
tp = 0.63 ± .05 microseconds
ts = 1.25 microseconds maximum

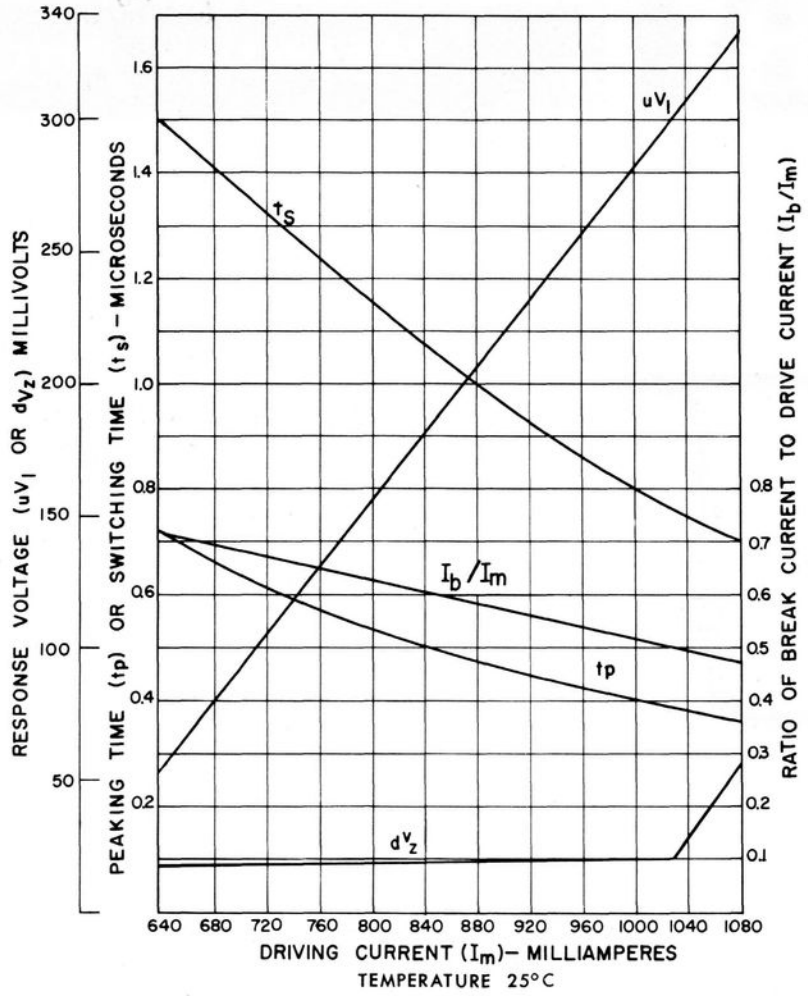


Figure 2. TYPICAL OPERATING CHARACTERISTICS

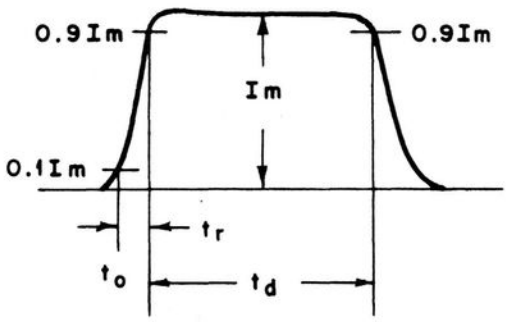


Figure 3. CURRENT PULSE

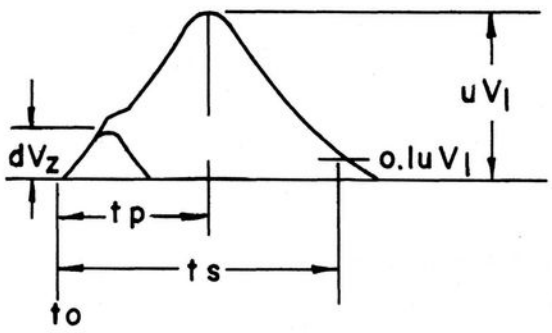


Figure 4. VOLTAGE RESPONSE

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